Claims

## 1. Compounds of formula (I)

$$R1$$
 $R3$ 
 $R3$ 
 $R3$ 
 $R3$ 
 $R3$ 
 $R3$ 
 $R3$ 

wherein

 $R_1$  is  $(C_1-C_7)$ alkyl, hydroxy $(C_1-C_7)$ alkyl or  $-(CH_2)_n$ -CHO, wherein n is 0-6;

R<sub>2</sub> is nitro, cyano or halogen;

10  $R_3$  is hydrogen,  $(C_1-C_7)$ alkyl or halo $(C_1-C_7)$ alkyl;

R<sub>4</sub> is hydrogen, (C<sub>1</sub>-C<sub>7</sub>)alkyl, COR<sub>10</sub> or SO<sub>2</sub>R<sub>13</sub>;

X is O or NH;

A is a group selected from:

15

**20**.

5

wherein R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are independently hydrogen, halogen, nitro, cyano, (C<sub>1</sub>-C<sub>7</sub>)alkyl, halo(C<sub>1</sub>-C<sub>7</sub>)alkyl, cyano(C<sub>1</sub>-C<sub>7</sub>)alkyl, amino, mono- or di(C<sub>1</sub>-C<sub>7</sub>)alkyl-amino, amino(C<sub>1</sub>-C<sub>7</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>7</sub>)alkyl, (C<sub>1</sub>-C<sub>7</sub>)alkoxy(C<sub>1</sub>-C<sub>7</sub>)alkyl, -NHCOR<sub>10</sub>, -N(COR<sub>10</sub>)<sub>2</sub>, -COR<sub>11</sub>, -OR<sub>12</sub>, -OSO<sub>2</sub>R<sub>13</sub>, -SO<sub>2</sub>R<sub>14</sub>, -NHSO<sub>2</sub>R<sub>13</sub> or -SR<sub>15</sub> or an imide ring; or R<sub>5</sub> and R<sub>6</sub>, R<sub>6</sub> and R<sub>7</sub>, R<sub>7</sub> and R<sub>8</sub>, or R<sub>8</sub> and R<sub>9</sub> form, together with any of the ring atom(s) to which they are attached, a condensed 5 to 7 membered aliphatic or aromatic carbocyclic ring or a condensed 5 to 7 membered heterocyclic ring containing

1 to 3 heteroatom(s) selected from N, O and S; R<sub>10</sub> and R<sub>11</sub> are independently (C<sub>1</sub>-C<sub>7</sub>)al

 $R_{10}$  and  $R_{11}$  are independently ( $C_1$ - $C_7$ )alkyl, ( $C_2$ - $C_7$ )alkenyl, halo( $C_1$ - $C_7$ )alkyl, amino( $C_1$ - $C_7$ )alkyl, mono- or di( $C_1$ - $C_7$ )alkylamino( $C_1$ - $C_7$ )alkyl, ( $C_6$ - $C_{10}$ )aryl, -N( $R_{16}$ )<sub>2</sub> or -OR<sub>17</sub>;

5

10

 $R_{12}$  and  $R_{15}$  are independently hydrogen,  $(C_1-C_7)$ alkyl,  $(C_2-C_7)$ alkenyl, halo $(C_1-C_7)$ alkyl, amino $(C_1-C_7)$ alkyl, mono- or di $(C_1-C_7)$ alkylamino $(C_1-C_7)$ alkyl,  $(C_6-C_{10})$ aryl,  $-COR_{18}$ ;

 $R_{13}$  and  $R_{14}$  are independently ( $C_1$ - $C_7$ )alkyl or ( $C_2$ - $C_7$ )alkenyl, halo( $C_1$ - $C_7$ )alkyl or ( $C_6$ - $C_{10}$ )aryl;

 $R_{16}$  and  $R_{17}$  are independently hydrogen,  $(C_1-C_7)$  alkyl,  $(C_2-C_7)$  alkenyl, halo  $(C_1-C_7)$  alkyl, amino  $(C_1-C_7)$  alkyl or  $(C_6-C_{10})$  aryl;

 $R_{18}$  is  $(C_1-C_7)$ alkyl,  $(C_2-C_7)$ alkenyl, halo $(C_1-C_7)$ alkyl or  $(C_6-C_{10})$ aryl;  $R_{19}$  and  $R_{20}$  are independently hydrogen, halogen,  $(C_1-C_7)$ alkyl or  $(C_2-C_7)$ alkenyl;

and wherein each aryl or ring residue defined above may be substituted; and pharmaceutically acceptable salts and esters thereof.

- 2. A compound according to claim 1, wherein R<sub>4</sub> is hydrogen and R<sub>3</sub> is methyl.
  - 3. A compound according to claim 1 or 2, wherein X in O.
- 4. A compound according to any of claim 1 to 3, wherein  $R_1$  is methyl or hydroxymethyl and  $R_2$  is nitro or cyano.
  - 5. A compound according to any of claims 1 to 4, wherein  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are independently hydrogen, halogen, nitro, cyano,  $(C_1-C_7)$ alkyl,  $(C_1-C_7)$ alkoxy, halo $(C_1-C_7)$ alkyl, hydroxy $(C_1-C_7)$ alkyl or -NHCOR<sub>10</sub>, wherein  $R_{10}$  is  $(C_1-C_7)$ alkyl, halo $(C_1-C_7)$ alkyl, hydroxy or  $(C_1-C_7)$ alkoxy.
    - 6. A compound according to claim 5, wherein at least one of R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> is a halogen.
- 7. A compound according to claim 6, wherein at least two of R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are selected from a group consisting of halogen, cyano and acetamido.
  - 8. A pharmaceutical composition comprising a compound of formula (I) together with a pharmaceutically acceptable carrier.

25

10

- 9. A method of hormonal therapy, comprising administering to a subject in need thereof a therapeutically effective amount of a compound of formula (I).
- 10. A method for the treatment or prevention of androgen receptor dependent conditions, comprising administering to a subject in need thereof a therapeutically effective amount of a compound of formula (I).
  - 11. A method according to claim 9 or 10, comprising administering a therapeutically effective amount of a compound of formula (I) orally.